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ABSTRACT

One of a series of seven modules developed to improve the knowledge and skills of vocational educators who are or will become involved in teaching handicapped students in regular education settings, this module, concerned with communication impaired students (those who are deaf or hard of hearing and those who have speech impairments), is designed to (1) explain the meaning of a communication handicap--what it is, what the range of severity is, and how it affects the student's vocational performance, (2) present the vocational educator with guidelines for establishing and carrying out a plan of individualized instruction for the student, and (3) provide listings of resource agencies and further readings to assist the vocational educator who is working with the student with a communication handicap. Important points in setting up an individualized instructional program are considered and suggestions are made for modifying existing programs to overcome problems. Two final sections cover (1) bibliographic sources and resource agencies and persons to contact for assistance, and (2) a set of problems/questions designed to enable the vocational educator to check his or her understanding of the ideas presented in the module and to apply the principles discussed to his or her own teaching situation. (Author/HD)

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MAINSTREAMING THE HANDICAPPED IN VOCATIONAL EDUCATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Serving the Communication Impaired

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California State Department of Education	Office of Vocational Education Office of Special Education

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The Consortium of the California State University and Colleges

STATE OF CALIFORNIA
DEPARTMENT OF EDUCATION

Vocational Education Support Unit

Statement of Understanding Between the Vocational Education Support Unit and the Special Education Support Unit

Background

The Vocational Education Act of 1968 (P.L. 90-576) has as one of its purposes the development of vocational training and retraining programs for handicapped persons.

To insure that such training is realistic with respect to the special needs of handicapped persons, the Act requires that state leadership in special education services and vocational education services enter into cooperative planning and program implementation arrangements.

Purpose

The purpose of this statement of understanding is to assure continued and augmented cooperation between the staffs of the Special Education Support Unit and the Vocational Education Support Unit of the State Department of Education in such actions as the following:

1. The joint development of provisions in the State Plan for the vocational education of handicapped persons in California
2. The joint review of those applications for funds for programs of projects providing benefits to handicapped persons.
3. The joint development of appropriate programs and project activities to meet the vocational education needs of the handicapped.
4. The joint development of appropriate inservice training of teachers for the handicapped and of vocational education teachers working with the handicapped.
5. To provide for intradepartment and interdepartment communication to facilitate program evaluation.

This statement of understanding is intended to formalize and recognize the working relationship that has long existed between these two services within the California State Department of Education.

For the Vocational Education Support Unit:

Signed: Samuel L. Barrett

State Director of Vocational Education

For the Special Education Support Unit:

Signed: Leslie Brinegar

Manager, Special Education Support Unit

Reprinted from California State Plan for Vocational Education. California State Department of Education, 1976.

STATE OF CALIFORNIA

Statement of Understanding Between the State Board of Education, the Board of Governors of the California Community Colleges, and the Department of Rehabilitation

Background

The Vocational Education Act of 1968 (P.L. 90-576) has as one of its purposes the development of vocational training and retraining programs for handicapped persons.

To insure that such training is realistic with respect to the special needs of handicapped persons, the Act requires that state leadership in special education services and vocational education services enter into cooperative arrangements.

Purpose

The purpose of this statement of understanding is to assure continued and augmented cooperation between the Department of Rehabilitation staff, the State Board staff, and the Board of Governors staff in such actions as the following:

1. The development of provisions in the State Plan for the vocational education of handicapped persons in California.
2. The review of applications for funds for programs or projects providing benefits to handicapped persons.
3. The development of appropriate programs and project activities to meet the vocational education needs of the handicapped.
4. The development of appropriate inservice training of teachers for the handicapped.
5. To provide for interdepartment communication to facilitate program evaluation.

This statement of understanding is intended to formalize the working relationship between these state agencies.

For the Department of Education and the State Board of Education:

Signed: Wilson Riles

Superintendent of Public Instruction, Director of Education, and executive secretary, State Board of Education

For the Department of Rehabilitation:

Signed: Ray Traynor

Acting Director, Department of Rehabilitation

For the Board of Governors of the California Community Colleges:

Signed: Glenn S. Dumke

Chancellor and the executive officer, Board of Governors of the California Community Colleges

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Reprinted from California State Plan for Vocational Education. California State Department of Education, 1976.

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Introduction

This is one of a series of modules developed by the American Institutes for Research to improve the knowledge and skills of vocational educators who will be serving the communication impaired student in regular vocational education settings.

The present module is designed to help you learn about the student whose ability to communicate is impaired. This classification includes those who are deaf or hard of hearing and those who have speech impairments.

The general purposes of this module are

1. to explain the meaning of a communication handicap: what it is, what the range of severity is, and how it affects the student's vocational performance.
2. to present the vocational educator with guidelines for establishing and carrying out a plan of individualized instruction for the student with a communication handicap.
3. to provide listings of resource agencies and further readings to assist the vocational educator who is working with the student with a communication handicap.

The module will consider important points in setting up an individualized instructional program for communication impaired students. Suggestions are made for modifying existing programs to overcome problems. A section listing resource agencies and persons to contact for assistance is included. Brief review sections are provided throughout the module. As assessment section is included which will enable the vocational educator to check his or her understanding of the ideas presented in the module and to apply the principles discussed to his or her own teaching situation.

The Educator, the Student, and the Task

What do you have to offer the communication impaired student in a regular vocational education class?

The Vocational Educator as a Human Resource

Mainstreaming handicapped students is a recent trend in education. If every individual is to become a functioning member of society, what better place for the individual to learn to function in the real world than in the regular classroom? Having handicapped persons participating in regular classrooms is something new, and that implies change. Adjustments will need to be made, but in most cases they are minor ones. Doubts will arise but knowledge can erase that. Questions will arise, but there are answers to be found. The needs and goals for handicapped students' education are not different from those of the non-handicapped person; it is only the means of achieving the goals that may be different.

Vocational educators play a particularly important role in the overall scheme of education. They guide the student in developing functional skills which will enable him to be a self-supporting member of society. The ability to be self-supporting is important to each individual but especially so to the handicapped. Through the vocational educator the student can learn the meaning of responsibility. The student can be given the opportunity to grow in independence and maturity. He can learn the role that productive work plays in achieving personal fulfillment. It is this practical knowledge that the communication impaired student so badly needs, and the vocational educator is the logical person to pass it on to him.

As has been stated before, mainstreaming is something new...new for the vocational educator and for the student. Let's look at two questions that cover the areas of greatest concern.

- I am not a special education teacher. What can I teach a communication impaired student?

  It is important to remember that the vocational needs of the handicapped students are essentially the same as those of the regular student. If your class benefits regular students it will benefit handicapped ones.

- What skills can I teach him? Will he be able to hold a job in the real world?

  The deaf and hard of hearing have been trained to work in all levels of employment...from professions and managerial positions to craftsmen and laborers. Moreover, according to national surveys "85 percent of deaf workers are successful in their occupations" (Kirk, 1972). The speech impaired are also found in all levels of employment. In short, communication impaired adults can adjust to practically any kind of job which does not place particular emphasis on communication skills.

A student is assigned to your class who is communication impaired. What does this mean to you as a vocational educator? The first thing to recognize is that the label exists as a means of helping you to help the student, it doesn't change the fact that he is first of all a person, and very much like your other students. Communication impaired means that the student has trouble hearing, understanding language, and/or talking. It tells you nothing about the person's potential.

Review

1. What can the communication impaired student gain from the vocational educator?
2. What practical considerations in your field of expertise will influence the employability of communication impaired students?

How familiar are you with hearing problems?

In its 1976 report to the U. S. Office of Education, the National Advisory Committee on the Handicapped estimated that there are 49,000 school age deaf students and 328,000 hard of hearing students.

Students who have trouble hearing are commonly divided into these two groups. Basically, they differ in the following way:

- deaf: those whose sense of hearing is nonfunctional
- hard-of-hearing: those whose sense of hearing is limited

The difference between the two groups is an important one in terms of how the student learns and how you can best teach him. Many people wrongly assume that a hearing loss means deafness. If the person is deaf, they reason, he cannot hear; and, since he cannot hear, there is little point in speaking to him. Often he is not expected to succeed or excel at intellectual, social, or vocational endeavors. A person with a moderate hearing loss who is labeled "deaf" may start to behave as though he were deaf if he isn't encouraged to use his existing hearing.

Hearing loss is commonly measured by an audiometer according to international standards. The loss may be

- conductive, in which a hearing aid to increase the volume of sound is probably helpful
- sensory neural, in which the loss is not of volume of sound but of high frequency ranges, in which case a hearing aid may not be particularly helpful.

The classification of hearing loss ranges from slight, in which the person may have difficulty hearing faint or distant speech, to extreme, in which he may hear some loud sounds but relies primarily on vibrations and vision as his means of receiving communication.

It is important to know the degree of hearing loss a student has in order to effectively teach him. The table on the next page makes clear that teaching methods will vary according to degree of hearing loss.

The time of onset of the hearing loss is also important in understanding the student. If a person has acquired speech before the loss of hearing, the whole communication process is likely to be different from that used by persons who have never known speech and language.

A person who has become hearing impaired during his childhood or later may have trouble with speech, but he at least has knowledge of spoken language. The person who has been deaf since birth has never heard a spoken word and his knowledge of language and speech is severely limited.

> It is important to remember that the major deficiency of children deaf since birth is their inability to develop speech and language comprehension through the sense of hearing and not the lack of hearing itself.

Since degree of hearing loss and age at onset are two key factors, what ranges in behavior might be expected? Suppose you have a student with only a mild hearing loss. This loss may not show itself easily and the symptoms could be misinterpreted as behavior problems:

- the student ignores, confuses, or doesn't comply with directions
- the student daydreams a good deal
- the student has a slight speech defect
- the student is lazy
- the student seems dull
- the student is always asking "what?"

Contrast this with a student with a severe hearing loss since birth. The symptoms are more obvious and less subject to misinterpretation:

- the student's speech may be limited and hard to understand
- the student's reading level may be two or more years behind his classmates

Hearing Loss and the Ability to Hear Normal Conversation, the Development of Speech and Language, and the Educational Management Required

Category or Description	Range of Pure Tone Loss, Average 1951 ASA	1964 ISO	Effect of Hearing Loss on Reception of Speech and Environmental Sounds	Effect of Hearing Loss on Development of Speech and Language	Educational Management
Normal	less than 20 dB	less than 30 dB	No adverse effect	No adverse effect	No special educational procedures.
Mild loss (Hard of hearing)	20 dB— 30 dB	30 dB— 40 dB	Difficulty in hearing faint speech at a distance. May experience no appreciable communication breakdown in school if preferential seating arranged.	If defective speech observed, causative factor probably not hearing loss. Will be able to learn speech normally by audition.	Preferential seating in regular classroom.
Marginal loss (Hard of hearing)	30 dB— 40 dB	40 dB— 50 dB	Hears average conversational speech at a distance of 3 feet, but will have trouble in a group. Can carry on face-to-face conservation but difficulty increases as distance from speaker increases. May miss as much as 50% of class discussion if voices are faint or speaker not in his line of vision.	May exhibit slight distortion or substitution of speech sounds. May have slightly limited vocabulary.	Speech reading. Individual hearing aid, if prescribed and training in its use. (Hearing aid orientation) Auditory training. Preferential seating in classroom. Speech therapy if necessary. Attention to vocabulary development if necessary.
Moderate loss (Hard of hearing)	40 dB— 60 dB	50 dB— 70 dB	Can understand loud conversational speech at a distance of about 3 feet. Will have increas-	Greater number of distortions and some omissions of speech sounds.	Speech reading. Speech training. Preferential seating.

			ing difficulty in school situations requiring participation in group discussions. Social intercourse is clearly affected. Background and foreground use of audition is essentially precluded, therefore, responds to foreground.	Deficient in language development. Evidence of limited vocabulary. May learn speech and language through hearing when sound is amplified.	Hearing aid and auditory training. Special class placement, if necessary.
Severe loss (Deaf, educationally deaf or partially deaf)	60 dB—80 dB	70 dB—90 dB	Can hear only amplified speech. May be able to hear moderately-loud voice at several inches from the ear. Will hear loud noises at some distance, auto horns, dogs barking, etc. Can identify environmental noises and may distinguish vowels but have difficulty with consonants. Relies on other sensory systems for monitoring the environment.	Speech and language do not develop spontaneously. Voice quality may show signs of deviation. Need to learn to communicate through use of special techniques. Personal-social and general environmental contact is difficult.	Speech reading. Speech education for the deaf. Emphasis on speech, language development. Preferential seating. Hearing aid and auditory training.
Profound loss (Deaf)	80 dB+	90 dB+	Unaware of loud noises but may respond reflexively to loud sounds close to the ear. Sound has no meaning. Cannot understand amplified sound.	Speech and language do not develop spontaneously. Voice quality and intonation deviate greatly.	Speech reading. Special education for the deaf. Hearing aid and auditory training.

Reprinted from The Relevance of Audiologic Data in Planning Mental Health Services for the Acoustically Impaired, Richard F. Krug, Mental Health and the Deaf, Altshuler and Rainer, (Eds.), Social and Rehabilitation Service, HEW, 1969.

- the student's writing skills may be inadequate in terms of vocabulary and sentence structure
- the student relies mainly on lip reading, sign language, and fingerspelling for communication

Profoundly deaf students may also give a false impression of retardation. When a student respond unusually to loud noises, does not respond to another's voice, or produces strange vocalizations, he may mistakenly be judged mentally retarded.

Myth: All people with hearing loss are deaf.

Fact: Most hearing impaired persons still have some ability to hear, even those classified as profoundly deaf.

Myth: People who cannot hear cannot talk.

Fact: People with all degrees of hearing impairment are able to, and usually do, learn to communicate (through the use of speech and/or sign language).

Myth: Deaf people are retarded.

Fact: The intelligence of hearing impaired people approximates the norm for hearing people.

Review

► 1. Name two important pieces of information about the deaf student that are basic to understanding his communication potential.

► 2. What serious side effects of hearing loss may result if the hard of hearing student is treated as though he were totally deaf?

Understanding the Communication Impaired Student with Speech Problems

How familiar are you with speech problems?

An individual's speech is one of his most personal attributes. Having a speech handicap can be socially embarrassing and humiliating. Knowing that people continually respond more to the sound than to the content of your speech can cause a person to be inhibited or withdraw into a world of silence. The social implications of this handicap are so closely interrelated with the handicap itself that a speech impairment is defined as any condition which results in speech which draws unfavorable attention to itself.

The 1976 report of the National Advisory Committee on the Handicapped estimates that there are some 2,293,000 speech impaired persons of school age. Many people think of speech impaired students as not being so bad off, and assume that they'll eventually "grow out of it." Whether a particular student can overcome a speech impairment or not depends on the cause of the problem and whether it can be alleviated. Meanwhile, the speech impaired student may experience failure and frustration in his attempts to communicate. Consider this quotation from a stutterer trying to land a job.

> "Everytime I'd ask for a job a funny look would come over their face and some of them would say no right away even before I finished what I was going to say. Some of the others, and one of them was a stutterer too, just waited til I finally got it out and then they would shake their heads. One storekeeper was so sympathetic I could hardly get out of there fast enough." (Van Riper, 1963)

The main types of speech impairments are

- articulation disorders
- rhythm disorders
- voice disorders
- language disorders

Articulation Disorders. Articulation disorders consist of (a) substitution, e.g., "th" for "s"; (b) omissions, the dropping of consonants from the endings of words, though they may also be dropped from the beginning or the middle; (c) distortions, e.g., particularly the sound of "s"; (d) additions, saying "sumber" for "summer." About 80 percent of the cases seen by speech correctionists are articulatory disorders. Baby talk and lisping are common examples of this type of speech impairment.

Rhythm Disorders. Normal speech is rhythmic and sequential. When the timing of speech is so far off the standard that it is conspicuous or unpleasant, the speaker is said to have a disorder of rhythm. The most common examples of this are stuttering and cluttering. Stuttering is a pattern of speaking broken by excessive prolongations or repetition of sounds, syllables, words, or parts of sentences. Self-consciousness often accompanies the stuttering problems and makes it more pronounced. Cluttering is a speech disorder characterized by excessive speed, disorganized sentence structure, and slurred sounds. The cluttered speaker may not be aware that his speech pattern is difficult to understand or annoying to others.

Voice Disorders. Voice disorders, not as common as articulatory disorders, appear mostly in connection with (a) vocal quality, (b) vocal pitch, and (c) vocal loudness. Vocalization can vary in pitch, loudness, flexibility, and quality. The speech produced may be too monotone, too breathy, too harsh, or too hoarse.

Language Disorders. Symbolization, or language disorders are serious problems in speaking, reading, and writing. The person with such a problem (dysphasia) may have delayed speech, substitute one word for another, or speak in nonsense syllables. He knows he has not said what he intended, but is unable to make the right words come out. Students with dysphasia may be incorrectly diagnosed as mentally retarded and seriously in need of corrective therapy.

This information may seem more technical than is needed for your purposes. However, your acquaintance with these terms will help you to interact with the special educator more effectively.

Many students with communication problems have a combination of two or more of these speech disorders. Multiple speech disorders may result from a number of causes, several of which are listed below.

Speech deficits associated with brain damage. Cerebral palsy and aphasia (difficulty using language) are conditions in which brain damage is associated with speech deficits. A students with brain damage may have multiple speech defects.

Speech deficits associated with hearing loss. Studies of speech handicapped persons in schools have shown a high correspondence with hearing loss. The speech of a student with a significant hearing impairment may be characterized by several types of defects. First, he may exhibit voice disorders such as speaking loudly or too softly. If he is severely hard of hearing, he may pitch his voice high and speak without intonation. Second, his speech may show many errors of articulation. The sounds which are unvoiced and are of a high frequency such "s," "f," "p," "t," and "sh" are most likely to be misarticulated.

Cleft palate or cleft lip. A structural defect in the palate or roof of the mouth is commonly called a cleft palate. This defect makes it difficult or impossible for the individual to close off the nasal air passage for proper articulation. The speech of a person with an unrepaired cleft palate may by hypernasal as a result of too much air escaping through the nose as the person talks. Cleft lip (incorrectly called "harelip") is a structural defect in the upper lip. It can cause defective speech if left unrepaired.

Review

► 1. Speech is considered to be impaired when the deviation from typical speech brings unfavorable attention to the speaker. Does this necessarily mean the person cannot be adequately understood?

► 2. Contrast the nature of articulation problems in speech with hearing deficiencies. Which is more apt to limit effective communication?

Capabilities and Limitations

Now that you have got some working knowledge of what communication impaired means, it might be useful to give you some idea of how it can affect a student's performance in the classroom.

Academic Performance. Language is one of the most complex of human skills and most language is acquired through hearing the language spoken by others. Consequently, the hearing impaired student is likely to be working with a much more limited vocabulary than his classmates. Since his vocabulary is limited, the level of his reading skills is likely to be less than that of his classmates. Knowledge of the individual student's achieved reading level is important to the vocational educator for planning purposes. The speech impaired student may also have a reading deficit, but a definite relationship between speech deficits and reading deficits has not yet been established.

Social Skills. Communication impaired students are likely to have underdeveloped social skills. This is due not so much to lack of potential as to their lack of experience in social interaction. The range of their social experiences is likely to be much more limited than that of their classmates simply because most people rely heavily on oral language in social interaction; the communication impaired student does not.

The hearing impaired student must rely on his other senses to pick up cues that convey meaning. For example, he watches the face of the speaker to assess the emotional content of the message. The student with a severe hearing loss relies heavily upon his ability to "read" what people say; and meanings conveyed by tone of voice, inflections, pitch, or volume of voice may be lost on him. If the person is a speechreader he takes what you say quite literally.

The speech impaired student's difficulty in expressing himself draws immediate and often unfavorable attention from others. When the student speaks, he may concentrate more on how he is saying something than on what he is saying. The speech impaired student may purposely avoid social situations in which he would be required to speak. When asked to

speak he may seek ways to avoid doing so.

Communication Skills. The communication impaired student relies on a variety of means of communication, depending on the degree of impairment. It is important that the educator be familiar with the student's optimum means for communicating.

A hearing aid is usually worn by anyone who has a hearing loss, regardless of the degree of loss. It is basically an amplifying system that increases the volume of sound to the user's ear. The system begins with a pick-up microphone that responds with harmonious physical movement to the sound that strikes it. The movement is changed to electrical variations and the variations are amplified and then translated by loudspeaker components into physical movements that carry to the listener by a custom-fitted mold worn in his ear. A hearing aid does not completely eliminate the problems associated with hearing loss. Thus, it will be useful only to the user who can benefit from the amplification of sound. The primary beneficiaries are those persons with conductive hearing loss.

If the nerve structures of the inner ear (sensory neural) have been damaged, sound is usually perceived with less than normal loudness and the sounds are less clear as well. The increased volume of sound does not help in making the speech less distorted. The person with a sensory neural hearing loss may not be able to hear the differences among words like mass, math, mat, and map, even with an adequate hearing aid in place.

Here are three points that can help you capitalize on the benefits offered by hearing aids:

- The speaker should stand close to the student. Hearing aids have a limited range of pickup.
- Nonauditory cues should be used to emphasize the spoken content of the message (such as hand gestures and facial expressions).
- Extraneous (background) noises should be controlled and diminished as much as possible; noise is the archenemy of hearing aid users since the hearing aid amplifies sounds indiscriminately.

The speech reader with moderate hearing impairment learns to interpret the facial and lip movements of the speaker to sharpen his understanding of what is being said to him. The deaf student on the other hand relies solely on his ability to interpret the lip and face movements of other people in order to understand speech. Lipreading requires the ability to interpret speech by picking up clues to words. The articulation of sounds such as "p" and "f" are readily visible. The articulation of sounds such as "k," "h," or "g" are not readily visible. The lipreader must be able to "fill in" the sounds he cannot see and infer the entire word.

Fingerspelling uses fixed positions of the five fingers for each letter of the alphabet. (See illustration on the following page.) Sign language is a language system consisting of formalized movements of the hands or arm to express thoughts. Deaf people use both methods together when communicating, fingerspelling some words and expressing others through sign language.

Total Communication is a name given to a simultaneous or combined method of speaking by the deaf. Using this method the deaf student communicates with others by means of simultaneously fingerspelling, signing, and speaking aloud. The total communication method is favored by some teachers of the deaf because it encourages the student to think and speak using regular English construction.

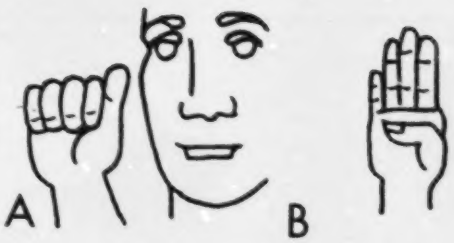
> The hearing impaired student's communication system can consist of the use of hearing aids, speech reading, and/or sign language separately or in combination.

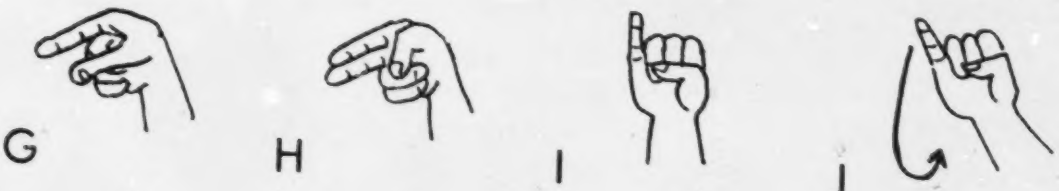
As you can see, the hearing impaired student relies on means of communicating other than those used by the hearing student. The speech impaired student uses essentially the same means of communicating as his classmates but may show some reluctance to express himself.

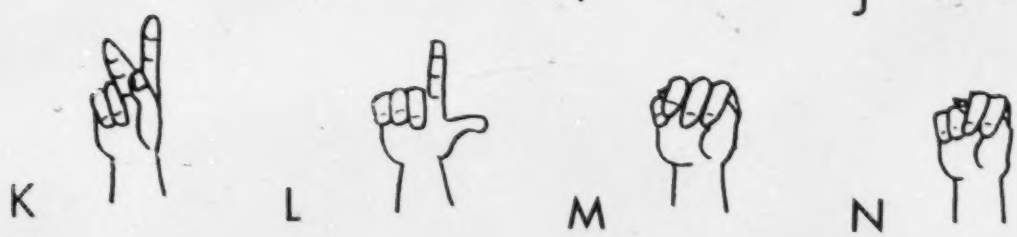
Vocational Aptitudes and Interests. The communication impaired student is likely to have the same aspirations as his hearing friends. As with any other student, the vocational educator can find out what these are by

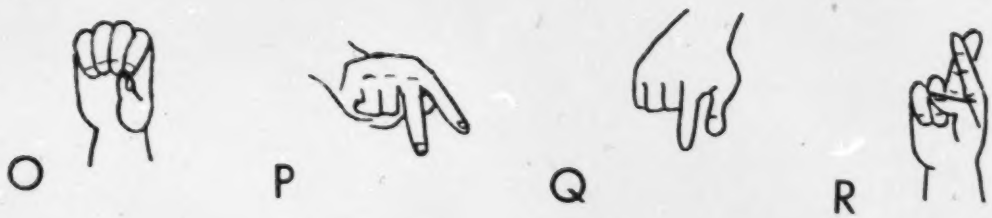
THE ALPHABET

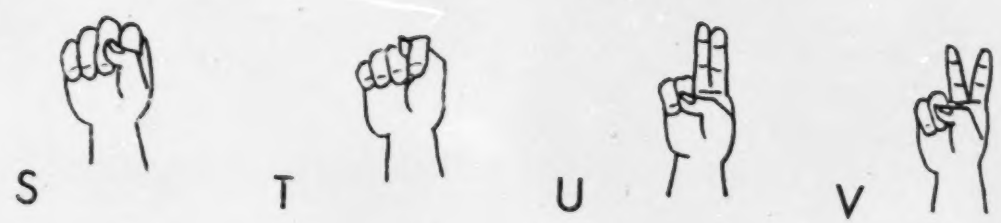
From in front of the speller

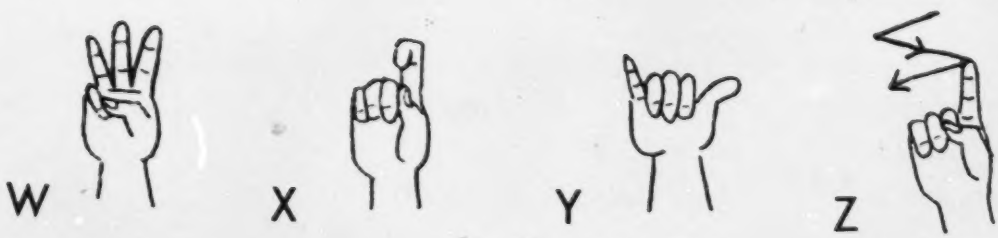












talking with the student. How he sees himself and his future role in the world of work is important information. Knowledge of his hobbies and outside interests can be extremely useful. The student's awareness of his family's and friend's jobs can give you some idea of how much exposure he has had to the job market. A variety of vocational aptitude tests and inventories can also be of use in determining the student's vocational potential.

It should be remembered that, by and large, the communication impaired student is capable of performing most jobs. Still, it will be of benefit to both you and the student to keep some limiting considerations in mind.

Foremost in importance is the degree of verbal communication proficiency required by the job. Obviously, a hearing impaired student would not be suited for a job as a switchboard operator, but he may be well suited for installing telephones. The job of receptionist in a busy office may be more than a speech impaired student can handle, but he may have the ability to type quickly and accurately and keep neat and efficient records in that office. Even though the speech impaired or hearing impaired person might not be appropriately placed in a job as a telephone operator, many such handicapped persons can use telephones for personal and for business affairs with special devices available throughout the Bell telephone system. In short, it is important to keep in mind how much ability to communicate verbally would be required in the job. In keeping with this thought, the degree of social skills required should also be considered. The communication impaired student can hold his own in most social situations, but there are practical limits.

In considering occupations for the communication impaired, remember to keep in mind

- the degree of communication skills required by the job
- the degree of social skills required by the job
- that within any given vocational area there is a job the communication impaired student is capable of performing

Now that you have got an understanding of the differing capabilities of the communication impaired student, let's consider what this means in relation to the vocational tasks you may ask him to perform.

Considering the Work Task

The task itself, the student's preferred communication method, the setting for instruction, and the extent of interaction among students all need consideration.

- Consider how you're going to communicate the task: by speaking, by using written materials, or by using visual aids? You may first consider the method of communication upon which the student relies the most. Does he hear most of what is said to him, only relying on speech reading to fill in the gaps, or is he deaf and completely dependent on speech reading for his information? Can the task be readily explained by visual methods? Is a sufficient amount of information about the task available in written form? Are visual aids available?

- Consider the student's ability to communicate. Does the task require a lot of "group" discussion? Will the task require a lot of talking on the part of the student?

- Consider the level of the student's social skills. Does the task require a great deal of sophistication in social skills? Does it require much interaction between the communication impaired student and other students? Will it later require interaction with other employees? Will it later require much interaction with the public?

- Consider the language and reading skills of the student. What is the reading level needed to understand the written material? How much knowledge of the English language is needed? Remember that a student who has been raised using sign language has a totally different concept of language than does the hearing child.

- Consider the facilities and sounds that are used to inform or warn students. The hearing impaired student won't hear them. Are warnings of emergencies made by sound (i.e., alarm bells, fire horns, etc.)? Are class periods indicated by bells? Do any of the safety devices on the machines use sound to warn of danger?

Now that you have considered all these things in relation to the communication impaired student you are ready to establish a plan for the student, based on his individual abilities and characteristics.

Review

► 1. Give reasons why inadequate social skills frequently

a) result from deafness

b) result from speech impairment

c) reduce language facility

d) require modified classroom procedures

Establishing a Plan for Individual Instruction

How would you set up a program of instruction for communication impaired students?

Basic Information You Can Use

In order to get a clear picture of where the student is now and where he is going, it is wise to know where he has been. You should acquire as much background information about the student as conveniently as possible.

- Academic Background. You can get an idea of his general schooling from the cumulative records of courses he has taken. Achievement/ability/proficiency tests scores in combination with his grades should give you an idea of his academic abilities. For the communication impaired student perhaps the most important academic information you can obtain is the current reading level of the student.

- Health Background. Knowledge of his health history can be gotten from attendance records and physical health records. His developmental history in speech and language skills can be determined by the speech/hearing specialist's evaluation of the student and expectations for recovery.

- Personal and Social Development. Knowledge about his family situation (how the family feels about him and how he feels about his family) can give you some idea of his personal and social development. Most important though is how the student feels about himself. His self-esteem and self-concept are perhaps the best indicator of his personal and social development. The school counselor can be of help by describing the student's relationship with other faculty and students.

- Vocational readiness. Finally, you should obtain information that will give you some idea of the vocational readiness of the student. Previous courses that were taken, previous work related experience, existing vocational skills, and general work habits and attitudes should give you some indication of the student's readiness.

Where to get the Information. It will help you to know the persons from whom you can get this information. The first place to start would be the student himself; he, better than anyone else, can tell you about his

past experiences and his expectations. He will share this information with you best if he is put at ease by your supportive approach.

Numerous sources of information exist. Each source can provide unique information about the communication impaired student that can be of considerable value to the vocational educator. After the student himself, the persons who would be most informed and have the most information would be the parents, the special education teacher, the speech/hearing specialist, the school counselor, school health personnel, and the work-study coordinator.

Source	What Kind of Information They can Provide
Parents	Personal and social adjustment
Special Education Teacher	Helpful teaching hints and information on instructional aids
Speech/hearing Specialist	Practical information about the communication impairment
School Psychologist	Emotional health of the student
School Counselor	Personal interest, aptitudes, and abilities of the student
School Health Personnel	Physical health of the student
Work-study Coordinator	"On the job" abilities and experience of the student

Once you have collected this information from all these different sources, what do you do with it? First of all, keep an open mind and remember that the labels you may encounter are only a means of classifying and not a description of the whole student. Some of the information you get will be written in professional jargon that may have little specific value. Again, try to remember that the language is a result of trying to classify and define a particular area; it is not meant to give an overall picture of the whole person.

Labels are not people...try to use the information available to you to develop a picture of the whole person.

Setting Goals

The background information, once you have put it all together, can give some idea of the student's limits and potential, as well as things you should watch out for. It will likely provide you with some ideas and suggestions for successful teaching strategies (the special education teacher can provide many such suggestions).

Now that you have got some idea of the student's background, the next step is planning his vocational future. Goals appropriate to the particular individual need to be established. This can be most effectively done when good rapport exists between student and teacher. If you feel comfortable with the student, he will be able to feel comfortable with you. With your help, the student can better define his vocational preference, interests, and abilities. You can also review the amount of vocational knowledge that the student has and determine how aware he is of career possibilities available to him.

Once the main vocational goals and objectives of the student have been established, you and the student can start defining course content (tasks and sub-tasks) that will build towards those goals. Expected course outcomes should be discussed and interim objectives (to measure progress) should be agreed upon. The social skills and maturity required in reaching the vocational goals should be a part of the planning. Learning to accept responsibilities, becoming self-reliant, dressing in a presentable manner, and feeling comfortable with other people, are all skills the student will have to acquire before he enters the world of work.

In short, you and the communication impaired student can cooperatively develop a plan to enable the student to take his place as a self-supporting member of society. The job relevant goals won't be any different from those for a non-handicapped student but the means for reaching them will vary. What will be needed is some changing and adapting in the instructional

framework that is used to achieve the goal. Let's look at some of the adaptations that will need to be made to provide the communication impaired student with an effective training situation.

Considering the Instructional Framework

School resources. Initially, you should become aware of the resources that are available to you within your school district. Let's look at some of the resource personnel that should become involved.

Work experience coordinator: Information and help with on-the-job problems can be worked out with the work experience coordinator. He can build upon the lessons the student has learned in the classroom and help him to apply them to the real work world.

School counselor: Emotional problems or behavioral problems can be dealt with by the school counselor. The counselor can help in bringing the communication impaired student to a higher level of social adjustment, particularly in work relevant situations.

Speech/hearing specialist: Therapeutic instruction may well be occuring for the communication impaired. Because the speech/hearing specialist is very familiar with the hearing and speaking potential of the student, you will probably want to check with that person regarding questions such as the nature of the communication disorder, therapy plan, and the attitude of the student toward his handicap.

Special education teacher: Remedial instruction of an academic nature, information on the handicapping condition, and suggestions for curriculum modification can be gotten from this person. The special education teacher is already knowledgeable about the student and is possibly the most valuable resource person available to the vocational educator.

A well equipped special education resource room can provide:

- special instructional materials.
- an "oasis" for the communication impaired student.
- emotional support in adjusting and coping with the demands on the communication impaired student.

- checks on the condition of equipment, such as whether new hearing aid batteries are needed.
- additional academic instruction if needed or special expertise (such as interpreters).

Other important school resources include audiovisual materials and equipment that are available. For example, silent 8mm films (especially those which use captions) can facilitate your communication with the deaf student when teaching specific skills.

> Information about captioned films is available from the Depository of Captioned Educational Films for the Deaf, Special Office for the Hearing Impaired, University of Nebraska, Lincoln.

Community Resources. You should also become aware of the resources that are available to you within or near your community. An important resource to be aware of is the Department of Rehabilitation Office nearest you. Additional resources can be suggested by the state's Supervisor for Hearing Impaired, Department of Rehabilitation, Sacramento, California. Some of the services that can be provided by the Department of Rehabilitation to qualified clients include the following:

- Counseling and guidance...carried out in close coordination with the school
- Personal adjustment training...to help the student to function effectively in spite of his handicap
- Job placement...help in finding a job and counseling with both employee and employer
- Vocational testing...when necessary for diagnosis or other services under an individual rehabilitation plan
- Interpreter services for the deaf...temporary services for special job relevant purposes.

Establishing contact with local businesses and private agencies is one of the most important ties that the vocational educator can form with the community. Some of the more familiar types of assistance include:

- Field trips to businesses to increase awareness of vocational opportunities
- Use of the newspaper as a basic source of jobs in the community
- Job tryouts on a short term basis and improved job placement opportunities
- Specialized assistance from local social service agencies or affiliated professional groups such as the California Speech and Hearing Association, or on the national level, the American Speech and Hearing Association.

Special Equipment. In an earlier section, we mentioned that the hearing impaired student may not be able to hear class bells, fire alarm signals, and auditory warning signals on machines and equipment. We also discussed the difficulties which may be presented when there is a necessity to use telephones. Special equipment may be able to help in these and similar problems.

- Warning lights: A flashing light can be used to indicate danger or emergencies. Substituting lights for bells or buzzers is a simple adaptation improving both the safety and functional performance of the communication impaired worker.
- Telephone adapters: For the hearing impaired, special earpiece attachments are available for use with hearing aids, as well as handsets with separate volume controls. For the speech impaired, a device is available which helps those who have diminished use of their vocal cords to amplify their speech. (Information about these adaptive devices is available from your Bell Telephone representative.)
- Special techniques with equipment modifications: The vocational educator should become aware of techniques and equipment modifications which help to overcome problems which may arise in particular job situations. For example, hearing students are taught to recognize a properly set a welding flame by the way it sounds, as well as the way it looks. However, techniques have been developed to enable deaf students to adjust torch intensity by noting flame color and shape and relating this to the initial position of the adjustment controls; a low cost ($50) attachment can be mounted to the welding equipment for precision adjustment. Similarly, deaf auto mechanics have learned to tune an engine accurately by vibrations of the car body rather than by hearing the car idle.

Hearing and speech are not always necessary in order to perform certain tasks, even though they may be customary. You should take another look at the kinds of jobs in your field and reevaluate which ones the communication impaired might be able to accomplish with an adaptation of equipment or procedures.

Physical Facilities. One of the most important considerations for the hearing impaired is the quality of lighting in the classroom. This is important since speechreading may be essential for the acquisition of information. The student's seating position in the classroom should be arranged so that he has a clear view of not only the teacher's face but of other students' faces as well. He should also be able to see the chalkboard and other display or demonstration materials clearly.

Where possible, care should be taken to minimize the classroom noise level when instruction is directed at the hearing impaired student. This is not only beneficial to him but also to the class as a whole. Hearing impaired students rely heavily on the residual hearing they do have, and their hearing aids amplify all sound. On the other hand, by turning down the hearing aid volume control, the hearing impaired student may be able to tolerate general shop noise better than most students while work activities are underway. Some speech impaired students may benefit from noise control as well, since their speech production may be weak in volume.

The classroom doesn't need to be changed for the communication impaired student...just make sure there is

- good lighting
- good seating
- a minimum noise level during instruction

Curriculum. The overall school program should provide the communication impaired student with self-help skills, improve his basic literacy, help him to develop good personal health habits, increase his understanding

of himself, and give him a feeling of a productive role in society. This implies a coordinated effort by the instructional staff and the development of a range of personal, social, and vocational skills.

When planning the vocational curriculum, you need to keep in mind the present language and reading level of the communication impaired student. It is possible that he may be two or more years behind his classmates in reading speed, level of vocabulary, and expressive language. Since he will rely to a greater degree on written material for his information than will his classmates, it is important that materials be selected that he can understand.

> Remember to keep in mind the language and reading level of the communication impaired student.

Methodology. As you teach, there are specific techniques you can use which will make it easier for the communication impaired student to function successfully in your classroom. They are simple things, not necessarily different from the way you approach teaching a non-handicapped student, but they should not be overlooked.

Two fundamental suggestions to keep in mind for the deaf or hard-of-hearing are:

- Keep within close range when speaking to the student
- Always face the student when speaking

Again, they sound like simple suggestions, but they are most important ones for the hearing impaired student who is trying to understand what you are saying. They are also points that can easily be forgotten by those who have two good ears.

Here are some other teaching techniques that are useful for communicating with hearing impaired students in the classroom:

- Check that the student is paying attention (not just "listening")
- Use many visual aids and supplementary written materials

- Write on the board without speaking, then turn back to the class and speak
- Articulate clearly and with normal speed
- Speak in a natural tone of voice; increasing the volume of your voice won't necessarily help the student
- Stand still when talking
- Provide outlines and vocabulary lists for any complicated topic being discussed
- Rephrase sentences if the student doesn't seem to understand, you may be using words he is not familiar with.
- Seat the student advantageously when he is participating in group discussions

What can be done to help speech impaired students participate effectively? In addition to adopting a positive manner the instructor should:

- look at the student when he talks
- wait until he says things, don't interrupt and finish his words or sentence
- ensure a climate of acceptance by other students, where ridicule has no place
- emphasize his assets but don't carry it to extremes
- encourage him to talk but don't force him
- make lists of words that he seems to have difficulty saying but which are important for the vocational area; he can practice these or get special help from his speech therapist
- control your facial expression, avoid displaying disturbance at the student's speech

> The list of do's and don'ts for communication impaired students seems long, but in time these techniques become second nature and they are done routinely.

Gaps in communication are bound to occur. Some strategies for compensating for this communication loss include:

The buddy system: No matter how bright he is or how diligently he tries, the hearing impaired student won't be able to understand everything that is going on. The handicapped student must often make an extra effort-and fatigue alone could cause him to lose efficiency. A buddy is a

classmate who can help the communication impaired student with directions he has missed or he can help the student to be tuned into what is happening, especially during group discussions.

Duplicate notetaking. It can be most helpful to the hearing impaired student if another student in the class is making a duplicate copy of the day's notes for him. This can be accomplished easily by using carbon paper. The hearing impaired student can then keep his eyes on the teacher to pick up the maximim amount of facial cues. Having an extra copy of the day's notes is a safeguard against the student missing out on the lesson. Notetaking also increases the interaction between the communication impaired student and other students.

Temporary helpers. Other services that you might use are tutors (to assist the student in subject matter), interpreters (most useful in the first few weeks when the student has not become familiar with the speaking patterns of the instructor and needs sign language to keep up), and counselors (to help with any adjustment problems that might arise). If a need for these services does arise and the school cannot presently provide them, special vocational education funds (the 10% set aside under Part B) should be requested. If these are unavailable, the Department of Rehabilitation's local office can be contacted.

As you can see, there are many ways that the communication impaired student can be helped to function successfully in the classroom, but none is more important than the helpful attitudes of his teacher and his classmates.

Keeping Attitudes in Perspective. The important role that attitude plays has been discussed thoroughly in the module "Developing a Positive Attitude" that is part of this series. A positive attitude can often spell the difference between success and failure for the communication impaired student. Because it is so important, it is appropriate for the vocational educator to periodically review his own attitude. It may be helpful to stop and ask yourself if you

- accept the communication impaired student as an integral part of the class

- foster feelings of independence by giving him responsibilities
- establish meaningful goals and standards similar to those for other students in the class
- readily acknowledge that the student does have a communication impairment and that it will effect your own priorities and activities
- try to discover the special abilities and interests of the communication impaired student just as you would with the "normal" student

> The patience, flexibility, and positive reinforcement of the vocational educator can be the communication impaired student's greatest resource.

Review

1. From what you have read, can you name at least four specific ways that you can reduce communication gaps by how you convey information to hearing impaired students?
2. If you are having trouble understanding a speech impaired student, what school personnel might you discuss the problem with and what sort of help might you get?
3. Name two specific ways a classmate can help a hearing impaired student in your vocational class.

Carrying Out a Plan of Individual Instruction

> How will you monitor progress and overcome instructional problems which develop during training?

Once you have gotten everything together and developed an instructional plan with the communication impaired student, there are some things you will want to keep in mind while you are carrying out the plan.

Periodic Assessment

At various times during the school year you will need to check the communication impaired student's progress and modify your instructional plan in the light of what you learn. By observing his behavior in class you can learn much about how he is adjusting, how he seems to learn best, and what skills he has mastered. Statements about the quality of his on-the-job performance during work experience can help point the way to improvements in course content to better serve the student. Results of regular class assignments, and checklists of skills, tools, and equipment mastered are good indicators of his progress.

It is important to remember that in the process of assessing the communication impaired student's progress, criterion-referenced measures will provide more meaningful results than will normative-referenced measures. The progress he has made towards the particular goals and objectives that you both established is what needs to be measured, and that's precisely what criterion referenced assessment does. Comparing the student's progress with that of regular students (normative assessment) is not appropriate.

> In order to truly assess the communication impaired student's progress, judge him on his own merits and not on how well he has done in comparison to the rest of the class.

While assessing the student's performance, it might be helpful if you also assess your own.

- Do you need more background information on the student to adequately serve his needs? Is so, remember the various persons who can provide useful information to you.
- Does a particular problem have you stumped? Remember the resources available to you, particularly the special education teacher or speech/hearing specialist.
- Can you and the student communicate comfortably with one another? A relaxed relationship between the two of you will increase your awareness of the student's strengths as well as his needs, and you can modify your approach accordingly.

Overcoming Problems

Even after careful planning, problems may arise. More than likely, you will be amazed at how readily the communication impaired student fits into your class, but nevertheless let's look at two general areas of special concern.

Sociability. The communication impaired student has trouble communicating, and because he has trouble communicating, he may not be as outgoing as other students. As with other socially withdrawn students, time, patience, and understanding can do wonders in making the student feel like part of the group. That is really all he does want...just to be treated like anybody else and be fully involved. Positive reinforcement is strongly recommended.

Capability. Once they have accepted a communication impaired student, there may be a tendency by friends and instructors (as parents often do) to "spoon-feed" him; in short, do everything for him. The person who is giving all this help does not realize it, but he is impeding the development of the communication impaired student, by expecting less from him than he is capable of. Don't speak for the speech impaired student, and don't hear for the hearing impaired. They must learn to do it on their own as much as possible.

> The student's only handicap should be his communication impairment, not lowered expectations nor social rejection.

Now let's look at some practical problems in specific areas:

Public Announcements: It's easy to forget that the hearing impaired student does not hear the daily announcements over the public address system. Announcements should be repeated "live" or written down. The same thing holds true for class announcements, be they related to homework or to forthcoming tests.

Vocabulary. As has been mentioned before, the communication impaired student is likely to have a less well developed vocabulary than his classmates. You can help him to build a better one by providing study lists of key words that will be used. Repeating them orally (one-by-one) will further help the hearing impaired student recognize them during your teaching.

Employability. Finding a job will require proving to the employer that the student can do the work and do it efficiently. Some people are under the mistaken impression that keeping a job is a problem for a communication impaired person. The communication impaired are found in all lines of work and have an enviable record in holding a job for which they are qualified.

Interpreters. If the student seems to be having a hard time getting started in class, it might be wise to make use of the services of an interpreter until he gets used to lipreading your speech and that of his classmates. The interpreter speaks his "language" and can be a great help in transmitting your "language" to him.

In review, as with any student, after a trial period you will want to take a look at how things are going. If the goals that you and the student set seem to be unrealistically high or low, you will want to change them. Together you can establish new goals, more in line with the student's developed abilities and interests.

Documenting Efforts and Outcomes

As the student progresses toward the original goals, it is important to keep records of where the student started, what he has accomplished, what problems that have come up, and how those problems were solved. Documentation of efforts and outcomes gives the student a way of knowing what he has accomplished. Knowing that something has been accomplished is the best kind of positive feedback there is. This is not only important for the student but for his parents as well. In fact, some type of feedback is important for all those involved in working with the communication impaired student.

Follow Up

Once the communication impaired student has completed your course, you may want to continue offering your assistance as a resource person. For example, you are able to:

- give advice and counsel to other teachers and vocational staff who may now be working with the student, sharing information about approaches that seemed particularly effective for the student
- provide the student with leads to jobs that you become aware of through your circle of business contacts
- inform the employer about the strengths and demonstrated abilities the student possesses, and help to alleviate his concern about hiring a handicapped person
- give advise and counsel to the trainee (your former student) if he runs into difficulty on the job, especially in any area with which you have familiarity or experience.

Review

1. What principle is important to keep in mind when you are deciding whether your way of assessing student progress is appropriate for the communication impaired student?
2. If you find that other students are doing too much of the handicapped student's work for him, and he is not gaining independence, what steps might you take to resolve the problem?
3. If an employer approaches you for names of competent graduates, but seems reluctant to consider your qualified handicapped student, how might you influence him to change his attitude?

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Altshuler, K. Z. and Rainer, J. D. (Eds.) Mental health and the deaf: Approaches and prospects. Washington: Social and Rehabilitation Service, HEW, 1969.

Gustason, G., Pfetzing, D., Zawolkow, E. Signing exact English. Silver Spring, Maryland: Modern Signs Press, National Association of the Deaf, 1972.

Kirk, S. A. Educating exceptional children. Boston: Houghton Mifflin Company, 1972.

National Advisory Committee on the Handicapped. The unfinished revolution: Education for the handicapped. Washington: U. S. Government Printing Office (017-080-01532-3), 1976.

Payne, J., Kauffman, J., Brown, G., DeMott, R. Exceptional children in focus. Columbus, Ohio: Charles E. Merrill, 1974.

Van Riper, C. Speech correction principles and methods. Englewood Cliffs, N. J.: Prentice-Hall, 1963.

Resource Section

The section is intended to provide suggestions for those vocational educators who would like to learn more about the handicapped, and to provide leads for those who are seeking resources to help them in serving the handicapped. It includes:

I. Bibliographic Resources

   A. Further study on the communication impaired

   B. Selected listing of published materials and resources

II. Agencies and Service Groups Providing Services to the Communication Impaired

   A. State of California

   B. Federal Offices and Agencies

   C. Private and Non-private Agencies and Organizations

I. Bibliographic Resources

A. Further Study on the Communication Impaired

California State Department of Education. Report of the study committee on statewide planning for the education of the deaf and severely hard of hearing in California public schools. Sacramento: California State Department of Education, 1970.

A study to determine ways in which existing programs might be strengthen and improved. Contains a section on vocational-technical programs.

California State Department of Education. Special language programming for exceptional children with language disorders. Sacramento: California State Department of Education, 1971.

Proceedings of a Special Study Institute focusing on the educational needs of students with language disabilities.

Kirk, Samuel A. Educating exceptional children. Boston: Houghton Mifflin Co., 1972.

An excellent basic resource in the field of special education. Provides an integrated and unified approach to understanding various handicapping conditions and their educational implications.

Love, Harold D. Educating exceptional children in regular classrooms. Springfield, Illinois: Charles C. Thomas, 1972.

Examines present policies and practices in serving handicapped students in regular classes. Each handicapped group is treated separately, with particular problems and solutions discussed.

Nelson, Hilding E. Serving students with special needs in vocational education. Gilman Hot Springs, California: Mt. San Jacinto College, 1971. (Filmstrips and cassette)

A multiunit series, this presentation consists of audiovisual packages with printed instruction guides and worksheets. Units in the series deal with different handicapping conditions and may be ordered separately. All are excellent sources of information for vocational education.

Northcott, W. H. (Ed.) The hearing impaired child in a regular classroom: Preschool, elementary, and secondary years. Washington: The Alexander Graham Bell Association for the Deaf, Inc., 1973.

A book for parents and educators. Provides guidelines for the entry of hearing impaired students into the regular class. Audiological and environmental factors and curriculum modification are discussed.

Stewart, Larry G. (Ed.) Perspectives in education of the deaf. Proceedings of National Forum V, Council of Organizations Serving the Deaf. Washington: Rehabilitation Services Administration, 1972.

This publication provides an overview of concerns and issues facing educators of the deaf. The Forum meets annually and concentrates on topics of current interest in order to explore courses of action in given areas.

B. Selected Listing of Published Materials and Resources

A bibliography of materials for handicapped and special education. Lambert, R. H. Center for Studies in Vocational and Technical Education, University of Wisconsin-Madison, 1975.

An extensive listing of vocational education resource materials for use in programs serving the handicapped. Can be obtained from:

Center for Studies in Vocational and
Technical Education
321 Education Bldg.
1000 Bastom Mall
Madison, Wisconsin 53706

Catalog of instructional materials for the handicapped. Clearinghouse Depository for Handicapped Students, California State Department of Education, Sacramento, 1972

Provides free instructional materials for handicapped students.

Directory of programs and services for the deaf in the United States. American Annals of the Deaf, Volume 121, #2, April, 1976.

Comprehensive listing of agencies and associations serving the deaf in the United States.

Services for special needs. American Telephone and Telegraph Co.

Explains special equipment available for persons with communication, visual, or motion impairments. Available on request from your local Bell Telephone business office.

Signing exact English: Seeing instead of hearing. Bustason, G. Pfetzing, D., and Zawolkow, E. Silver Springs, Maryland: Modern Signs Press, 1972.

An illustrated manual of American Sign Language used by the deaf, of practical value to the vocational educator who wishes to learn finger-spelling and/or some occupationally relevant signed concepts.

The Governor's Committee for Employment of the Handicapped: Organizational Handbook. The California Governor's Committee for Employment of the Handicapped, Sacramento: State of California Employment Development Department, 1974.

An informative publication which details the goals, organization, and functions of this important task force. Includes a directory of local committees for employment of the handicapped.

Directory: Sources for Handicapped Job Applicants. The California Governor's Committee for Employment of the Handicapped. Sacramento: State of California Employment Development Department, 1976.

A source book prepared for employers seeking to hire the handicapped. This 80-page publication lists the principal rehabilitation and training agencies within the state. State, regional, and local contacts are listed for the Employment Development Department, Department of Rehabilitation, public and private rehabilitation facilities, Regional Occupational Programs, community colleges, and state colleges and the University of California. The Directory includes a brief description of each type of recruitment source and the services it offers to applicants and employers.

II. Agencies and Service Groups Providing Services to the Communication Impaired

A. State of California

California State Department of Education

Office of Vocational Education
721 Capitol Mall
Sacramento, CA 95814
Samuel Barrett, Director

Office of Special Education
721 Capitol Mall
Sacramento, CA 95814
Les Brinegar, Asst. Superintendent and Director

The Clearinghouse Depository for the Handicapped Student
721 Capitol Mall
Sacramento, CA 95814

An office which offers assistance in the procurement of specialized instructional materials and equipment for handicapped students. Provides consultant services for programs involving specialized use of media for instructional purposes.

Comprehensive Employment Training Act (CETA)
50 Fulton Street, Rm. 445
San Francisco, CA 94102
Howard Williams, Regional Manpower Coordinator

The purpose of CETA is to provide job training and employment opportunities for underemployed persons through a flexible and decentralized system of federal, state and local programs.

Office for Handicapped Individuals (in HEW)
50 Fulton Street
San Francisco, CA 94102
Martha Hislop, Regional Coordinator

Serves as the regional focal point, within the federal Office of Human Development, for program coordination and planning relevant to the physically and mentally handicapped.

California Area Learning Resource Center
600 S. Commonwealth Avenue, Suite 1304
Los Angeles, CA 90005

California area distribution center for specialized learning materials for handicapped students. Operates in cooperation with the National Center for Educational Media and Materials for the Handicapped (NCEMMH).

Below is a list of associate centers affiliated with the California Learning Resource Center, all of which circulate materials for handicapped students.

1. Anaheim City Schools
2. Placer County Office of Education, Auburn
3. Kern County Supt. of Schools, Bakersfield
4. San Juan Unified School District, Carmichael
5. Special Education Development Program, Chico
6. Contra Costa County, Concord
7. Imperial County Supt. of Schools, El Centro
8. Center for Exceptional Children, Eureka
9. Fountain Valley Elementary, Fountain Valley
10. School of Education/CSU-Fresno
11. Devereaux Schools in California, Goleta
12. Stanislaus County Dept. of Education, Modesto
13. Lancaster School District
14. Office of Supt. of Schools, Napa
15. Newport-Mesa Unified School District, Newport
16. Instructional Materials Lab. CSU-Northridge
17. Orange Unified School District
18. Palcentia Unified School District
19. Tehama County Dept. of Special Education, Red Bluff
20. Shasta County School Office, Redding
21. Rowland Unified School District, Rowland Heights
22. Sacramento City Unified School District
23. Sacramento County Office
24. Department of Education, Sacramento
25. Scholarship and Special Instructional Programs, Sacramento
26. Office of County Supt. of Schools, San Bernardino
27. Department of Special Education CSU-San Diego
28. Teacher Learning Center, San Francisco
29. Office of Education, San Jose
30. San Luis Obispo County Schools
31. Santa Barbara County Schools
32. Special Education, Santa Barbara
33. Sonoma County Office of Education, Santa Rosa
34. Lassen County School District, Susanville
35. Torrance Unified School District
36. Ventura Unified School District
37. Visalia School District

California State Department of Rehabilitation
830 K Street Mall
Sacramento, CA 95814
Edward V. Roberts, Director

Responsible, at the state level, for state-federal programs of vocational rehabilitation for the disabled. The disabled include persons handicapped by mental or physical illness or impairment. The primary objective of this agency is to prepare disabled persons for gainful employment. Under federal sponsorship, the State Department of Rehabilitation supports research and demonstration projects, training qualified personnel, and facilities construction and improvement.

District Offices

Chico District Office
Service Area: Colusa, Glenn, Butte, Siskiyou Modoc, Shasta, Lassen, Tehama, Trinity, Yolo, Yuba, Plumas, Sutter, Sierra, Nevada

Sacramento District
Sacramento, Placer, El Dorado, Alpine

Santa Rosa District
Del Norte, Humbolt, Lake, Mendocino, Napa Solano, Sonoma

Oakland District
Alameda

San Francisco District
San Francisco

Pleasant Hill District
Contra Costa, Marin

San Jose District
Santa Clara

Redwood City District
San Mateo

Stockton District
Amador, Calaveras, San Joaquin, Stanislaus, Tuolumne

Riverside District
Riverside, Imperial

San Bernadino District
Inyo, San Bernadino

Fresno District
Merced, Mariposa, Madera, Fresno

Bakersfield District
Kern, Kings, Tulare

Salinas District
Monterey, Santa Cruz, San Benito

Santa Barbara District
San Luis Obispo, Santa Barbara

Long Beach District
South Los Angeles

San Diego District
San Diego

Downtown Los Angeles District
Los Angeles

East Los Angeles District
East Los Angeles

Van Nuys District
Northwest Los Angeles

Inglewood District
West Los Angeles

Anaheim District
Orange

Los Angeles Mid-Cities District
South Central Los Angeles

Norwalk District
Los Angeles

Covina District
Los Angeles

Pasadena District
Northeast Los Angeles

The Governor's Committee for Employment of the Handicapped
State of California
Employment Development Department
800 Capitol Mall
Sacramento, California 95814

At the state level, the Governor's Committee on Employment for the Handicapped forms a link between the President's Committee and local committees within the State of California. The primary goal of the Governor's Committee is to create a climate of equal employment opportunity for handicapped persons. Through local organizations, the committee seeks to develop job information, educate the public concerning job needs and abilities of persons with handicaps, assist agencies concerned with employment of the handicapped, and works toward eliminating architectural barriers which limit the employment opportunities of the physically limited.

Publications are available from the Governor's Committee on affirmative action, hiring the handicapped, disabilities in employment, architectural barriers, employment guides for the handicapped person, demographic and statistical information, and a variety of relevant guides, handbooks, and periodicals. Films are also available.

Listings of these materials can be obtained by writing to California Governor's Committee for the Employment of the Handicapped, 800 Capitol Mall, Sacramento, California, 95814, or by calling (916) 445-0676.

B. Federal Offices and Agencies

Office of Education

A branch of the Department of Health, Education, and Welfare, the Office of Education aids state and local educational agencies in the establishment and maintenance of school systems. This office is responsible for Federal financial assistance to local agencies for special studies and programs, and gathers and disseminates information on the condition and progress of education in the United States.

Bureau of Occupational and Adult Education

National Advisory Council on Vocational Education

Division of Vocational and Technical Education

Comprehensive Employment Training Act

Bureau of Education for the Handicapped

National Advisory Committee on the Handicapped

Office of Human Development

Focuses resources within the Department of Health, Education, and Welfare on serving groups with special needs: children and youth, the aged, the handicapped, native Americans, and people living in rural areas. This office is responsible for effective policy development and for program management at the federal level.

President's Committee on Employment of the Handicapped

Committee for Barrier-Free Design

Office for Handicapped Individuals

Rehabilitation Services Administration

Office of Developmental Disabilities

Architectual and Transportation Barriers Compliance Board

National Center on Educational Media and Materials for the Handicapped
The Ohio State University
220 West 12th Avenue
Columbus, Ohio 43210

This agency provides a comprehensive national program of activities to facilitate the use of educational technology in instructional programs for the handicapped. Services are provided in cooperation with Area Learning Centers, specialized offices, and various public and private agencies.

Specialized Office for the Deaf and Hard of Hearing
University of Nebraska-Lincoln
175 Nebraska Hall
Lincoln, Nebraska 68508

Specialized branch of the National Center on educational media and materials serving the deaf and hard of hearing. Instructional materials available at no cost.

President's Committee on Employment of the Handicapped
1111 20th Street, N.W.
Washington, DC 20210

Facilitates the development of maximum employment opportunities for the handicapped.

Trace Research and Development Center for the Severely Communicatively Handicapped
University of Wisconsin-Madison
922 ERB
1500 Johnson Drive
Madison, Wisconsin 53706

This organization provides printed and audio-visual materials and information on non-vocal communication techniques and aids. (formerly the Cerebral Palsy Communication Group)

C. Private and Non-profit Agencies and Organizations

Alexander Graham Bell Association for the Deaf
3417 Volta Place, N.W.
Washington, D.C. 20007

Organizations of professional workers and others interested in research and training for the deaf. Serve as information center on speech and hearing problems.

American Speech and Hearing Association
9030 Old Georgetown Road
Bethesda, MD 20014

Professional association of specialists in speech pathology and audiology.

Deaf Counseling and Referral Agency (DCARA)
1624 Franklin Street. Suite 1220
Oakland, CA 94612

This agency provides comprehensive counseling and referral services for the deaf which include arranging for interpreters, providing consultation to professionals working with the deaf, assistance in contacts with social welfare agencies, and tutorial services. The Young Adult Life Adjustment, Counseling, and Education Program assists deaf persons from 17-35 in coping with educational, vocational, and social adjustment problems. A newsletter is published monthly.

Greater Los Angeles Council on Deafness
621 South Virgil Avenue
Los Angeles, California 90005

This organization works to better the social, educational, and cultural welfare of the deaf community in Los Angeles. It has an employment committee, a newsletter, and frequent activities which are organized by and for deaf persons.

Junior National Association of the Deaf
Gallaudet College
Florida Avenue at 7th Street, N.E.
Washington, DC 20002

Supported by the National Association of the Deaf, this organization of young deaf persons promotes citizenship and opportunities for it's members to become self-directed and realize their full human potential.

National Association of the Deaf
814 Thayer Avenue
Silver Springs, MD 20910

A large, national organization of deaf persons which promotes education, fair employment practices, supportive legislation, and employment surveys and job information for the deaf.

Registry of Interpreters for the Deaf
P. O. Box 1339
Washington, DC 20013

This organization maintains a registry of all interpreters for the deaf in the United States. A directory of interpreters can be obtained from the National office. California chapter offices can be contacted for interpreting services.

Northern California Chapter:	Stan Smith, President 3107 Ida Drive Concord, CA 94519
Southern California Chapter:	Caroline L. Preston, President 14825 Nordhoff Street Panorama City, CA 91402

Assessment Section

The questions in this section are intended as a check of your general understanding of the instructional considerations involved in teaching handicapped students in regular vocational classes.

The problems which follow are not "formula" questions in which a precise and exact answer is possible. Rather they are meant to stimulate your thinking and cause you to reflect on the content of the module as you write or type your response on separate sheets of paper.

If you intend sending your responses to a cooperating agency for evaluation, be sure that you

1. Indicate the complete name of the module
2. Number all responses (Questions 1a, 1b, etc.)
3. Enclose your name and return address.

Problem 1.

Assume you learn that you will have two handicapped students in your upholstering class next semester. Both are speech impaired, one due to severe stuttering and the other due to deafness since early childhood. Upon further inquiry, you learn that the deaf student has recently transferred from a school system where deaf students were not "mainstreamed" with regular students. Neither student had previous vocational training, and both have led "sheltered" home lives. Contrast the two students in terms of the tentative assumptions you might make about

a) their preferred means of communication.

b) their developed vocabulary levels and reading levels.

c) the kinds of adjustments needed in your classroom instruction.

Problem 2.

A hard of hearing student who uses a hearing aid with limited benefit, has asked if he can enroll in your automotive body shop. You are reviewing the job tasks to see which are likely to be difficult but could be accomplished by adaptive instructional techniques. What problems, possible alternatives and most likely solution would you anticipate in

a) his receiving instructions during the class (consider both the classroom and the noisy work room)?

b) his communicating with "customers" (consider contacts in person and on the phone)?

c) his acceptability to a prospective employer (consider both work experience and job placement)?

Problem 3.

You have noticed that one of your vocational students in drafting class seems to be doing poorly, much worse than you would have expected based upon his prior scholastic record. He has turned in 9 of 12 required assignments, most were late and had basic defects. You would like to establish whether the student is not motivated (he spends a lot of time daydreaming), is lazy (he seems to ignore directions), or has difficulty learning (he says "what" when his name is called). You begin to suspect his hearing. What might you do in terms of

a) contacting other school personnel?

b) discussing the situation with the student?

c) modifying your classroom approach?

Problem 4.

Assume that you are a work-experience coordinator, supervising a deaf student at a bakery. When he was placed, the student had only had a course in general foods preparation and service. The employer has been satisfied with the student's work in baking, cake decorating and other helping activities in which he has been "under the wing" of a journeyman baker. However, he has been reluctant to place the student in the store, where he would have direct customer contact. In terms of career development, you feel the opportunity should be afforded the student. How might you

a) reduce the anxieties of the employer?

b) suggest steps that could be taken on the job to assure customer satisfaction?

c) consider modifications in the general foods course that precedes placement at the bakery?

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